



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

destroying both sensibility and the power of voluntary motion, particularly as exemplified in the hybernation of animals, to its mechanical operation of diminishing the fluidity, or producing solidity, in the oily medium by which these powers are exercised.

2. A letter from Prof. Hanson to G. B. Airy, Esq., F.R.S., A.R., was also read, "On a New Method of computing the Perturbations of the Planets whose eccentricities and inclinations are not small." Communicated by G. B. Airy, Esq., F.R.S.

The author announces that he has found a method by which the absolute perturbations of planets for any given time, with any given eccentricity and inclination of the orbit, may be calculated; and he exemplifies his method by applying it to the computation of the perturbations produced by Saturn on the comet of Encke, in every point of its orbit; a problem of which hitherto there existed no solution.

3. A paper was also in part read, entitled "On the minute structure of the Skeletons or hard parts of the Invertebrata." By W. B. Carpenter, M.D. Communicated by the President.

January 19, 1843.

GEORGE RENNIE, Esq., V.P., in the Chair.

John Gould, Esq., Sir Benjamin Heywood, Bart., and Edward Solly, jun., Esq., were balloted for and duly elected Fellows of the Society.

Captain Edward Belcher, R.N., was balloted for, but not elected a Fellow of the Society.

The following papers were read:—

1. "Variation de la Déclinaison et Intensité Horizontale observées à Milan pendant vingt-quatre heures consécutives le 25 et 26 Novembre, et le 21 et 22 Décembre 1842." Par Prof. Carlini, For. Mem. R.S.

2. The reading of a paper, entitled "On the minute structure of the Skeletons or hard parts of Invertebrata," by W. B. Carpenter, M.D., was resumed and concluded.

The present memoir is the first of a series which the author intends to communicate to the Society, and relates only to the Mollusca; and he proposes, hereafter, to extend his inquiries to the skeletons of the Echinodermata, and the various classes of articulated animals. After adverting to the classifications of shells proposed by Mr. Hatcher and Mr. Gray, from the propriety of which he finds reason to dissent, he proceeds to state the results of his microscopic examination of the texture of shells under the several following heads. First, shells having a prismatic cellular structure,